## Fate Report for Case # P-18-0279

#### **Fate**

#### **Summary Statement**

Fate P-18-0279 **Summary** FATE: **Statement:** MW = 2070 with 0% < 500 and 0.79% < 1000Liquid with MP < 25 °C (E) S = Negl. $VP < 1.0E-6 \text{ torr at } 25 \text{ }^{\circ}\text{C } (E)$  $BP > 400 \, ^{\circ}C$ (E) H < 1.00E-8 (E)POTW removal (%) = 90 via sorption Time for complete ultimate aerobic biodeg > mo Sorption to soils/sediments = v.strong PBT Potential: P3B1 \*CEB FATE: Migration to ground water = negl

PMN Material:

Overall wastewater

treatment removal is 90% via sorption.

Sorption to sludge is strong

based on data for high molecular weight polymers.

Air Stripping

(Volatilization to air) is negligible based on data for high molecular weight polymers.

Removal by biodegradation in wastewater treatment is negligible based on data for high molecular weight polymers.

The

aerobic aquatic biodegradation half-life is greater than months based on data for high molecular weight polymers.

The anaerobic aquatic

biodegradation half-life is greater than months based on the aerobic biodegradation half-life. The anaerobic biodegradation half-life is projected to be greater than or equal to the aerobic biodegradation half-life.

Sorption to soil and sediment is very strong based on data for high molecular weight polymers.

Migration to groundwater is s

negligible based on data for high molecular weight polymers.

**PMN** 

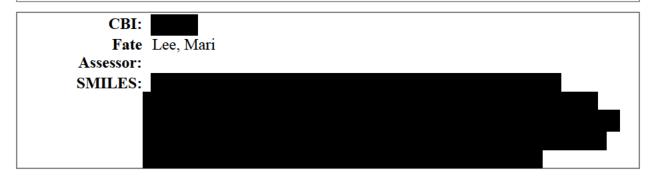
Material:

High Persistence (P3) is based on the anaerobic biodegradation half-life.

Low Bioaccumulation potential (B1) is

based on data for high molecular weight polymers.

Bioconcentration/Bioaccumulation factor to be put into E-Fast: N/A.



### **Physical Properties**

Property		EPI
	Value	
Molecular Form:		
Molecular Wt.:	2070.0	
% < 500:	0.0	
%	0.79	
< 1000:		

Property	Measured	Method	Estimated	Method	EPI
	Value		Value		
Melting					
Point:					
Boiling			>400		
Point:					
BP					
Pressure:					
Vapor			< 0.000001		
Pressure:					
Water			< 0.000001		
Solubility:					
Log P:					

Property	Measured Value	Method	Estimated Value	Method	EPI
Log Kow:					
Log Koc:					
Log BCF:					
Henry's					
Law:					
рН:					
pН					
<b>Comment:</b>					
Fate Analysis					

Hydrolysis (t1/2,	Volatilization	Volatilization
da):	(t1/2)	(t1/2)
	- River (hr):	- Lake (da):
Atm Ox Potential	<b>Atm Ox Potential</b>	Atm Ox Potential
(t1/2)OH (hr):	(t1/2)O3	(t1/2) Total
	(hr):	(hr):
MITI Linear:	MITI	
	NonLinear:	
Biodeg Linear:	Biodeg	
	NonLinear:	
Biodeg Survey	<b>Biodeg Survey</b>	
ult:	Prim:	
STP (% removal)	STP (% removal)	
Total:	Biodeg:	
STP (% removal)	STP (% removal)	
Ads:	Air:	

# Rationales

Removal in	
Wastewater	
<b>Treatment:</b>	
Atmospheric	
Oxidation:	
Hydrolysis:	
Photolysis:	
Aerobic	
<b>Biodegradation:</b>	
Anaerobic	
Biodegradation:	

Sorption
to Soil and
Sediment:
Migration to
Groundwater:
Persistence - Air:
Persistence
- Water:
Volatilization
from Water:
Soil:
Sediment:
Other:
Standard:
Bioaccumulation:

**PBT Ratings** 

Persistence	Bioaccumulation	Toxicity	PBT Comments
3	1		

#### **Exposure-Based Testing**

Exposure-Based	
<b>Testing:</b>	

## Fate Ratings Removal in WWT/POTW

(Overall):

Removal in 90 WWT/POTW (Overall):

Condition	Rating	Rating Description			Comment	
	Values	1	2	3	4	
WWT/POTW	3	Low	Moderate	Strong	V. Strong	
Sorption: WWT/POTW	4	Extensive	Moderate	Low	Negligible	
Stripping: Biodegradation Removal:	4	Unknown	High	Moderate	Negligible	
Tremovan.		Unknown	Complete	Partial		

Condition	Rating		Rating Description			Comment
	Values	1	2	3	4	
Biodegradation						
Destruction:						
Aerobic	4	<=	Weeks	Months	>	
Biodeg Ult:		Days			Months	
Aerobic Biodeg		<= Days	Weeks	Months	>	
Prim:					Months	
Anaerobic	4	<= Days	Weeks	Months	>	
Biodeg					Months	
Ult:		_				
Anaerobic		<= Days	Weeks	Months	>	
Biodeg					Months	
Prim:				ъ		
Hydrolysis (t1/2		<= Minnton	Hours	Days	>=	
at pH 7,25C) A:		Minutes			Months	
Hydrolysis (t1/2		<=	Hours	Days	>=	
at pH		Minutes	nours	Days	Months	
7,25C) B:		winates			Months	
Sorption to	1	V.	Strong	Moderate	Low	
Soils/Sediments:	•	Strong	Sureng	1,10 001010	20	
Migration to	1	Negligible	Slow	Moderate	Rapid	
Ground Water:		00			•	
Photolysis A,		Negligible	Slow	Moderate	Rapid	
Direct:					•	
Photolysis B,		Negligible	Slow	Moderate	Rapid	
Indirect:					_	
Atmospheric Ox		Negligible	Slow	Moderate	Rapid	
A, OH:		_			_	
Atmospheric Ox		Negligible	Slow	Moderate	Rapid	
B, O3:						

## Bio

## **Comments:**



## **Fate Comments:**

**Fate Comments:** 

# Comments/Telephone Log

Artifact	Update/Upload Time